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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,265	12/14/2001	GopalaKrishna Reddy Kakivaya	MSFT-0736/183220.01	6084

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
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2178

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/017,265

Applicant(s)

KAKIVAYA ET AL.

Examiner

Adam L. Basehoar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-27 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-27 and 29-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the RCE filed 12/12/06.
2. The previous rejections under UMIL have been withdrawn as necessitated by Amendment.
3. Claims 1-13, 15-27 and 29-41 are remain pending in the case. Claims 1, 16, and 30 are independent claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-6, 8-10, 13, 15-21, 23-25, 29-35, and 37-39 are rejected under 35 U.S.C. 102(a) as being anticipated by W3C, “Web Services Description Language (WSDL) 1.1”, 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).

-In regard to substantially similar independent claims 1, 16, 30 and dependent claims 13, 15, and 29, W3C teaches a method, computer readable medium, and device for providing interface description for a service of a device in a computing system, comprising:

creating a one to one mapping of each type in the device or object to an XML schema (Page 4: “Types- a container for data type definitions using some type of system (such as XSD)” & “WSDL recognizes the need for rich type systems for describing message formats, and supports the XML schema specification”; Page 5: e.g. Example 1); and

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describing the one to one mapping with an extensible markup language (XML)-based Interface Description Language (IDL)(Page 1: Abstract; Pages 3-4: Introduction: “A WSDL document”).

-In regard to dependent claims 2, 17, and 31, W3C teaches wherein the XML based IDL is Type Description Language (TDL)(Page 4: “Types”; Pages 13-14: “2.2 Types”).

-In regard to dependent claims 3, 18, and 32, W3C teaches creating a one to one mapping from a programming construct (Page 5: Example 1: “<types>.....</types>”) to an XML schema for describing the programming construct (Page 4: “WSDL recognizes the need for rich type systems for describing message formats, and supports the XML schema specification”; Page 9: “types, which provides data type definitions used to describe the messages exchanged”).

-In regard to dependent claims 4, 19, and 33, W3C teaches wherein the programming construct is one of pointer, class, array, subtype, enumeration, service reference, or bit field (Pages 13-14: “2.2 Types”).

-In regard to dependent claims 5, 20, and 34, W3C teaches creating a one to one mapping from a constant value of complex type to an XML schema for describing the constant value of complex type (Page 11: “<complexType>....</complexType>”).

-In regard to dependent claims 6, 21, and 35, W3C teaches creating a one to one mapping from at least properties, methods, events of the type system to an XML schema for describing the at least one of properties, methods, events (Page 5: Example 1: “<element name = “tickerSymbol” type= “string”/>”).

-In regard to dependent claims 8, 23, and 37, W3C teaches wherein the XML-based IDL as a wire format for message communications relating to the service between devices of the computing system (Page 12: “wire format is actually XML”).

-In regard to dependent claims 9, 24, and 38, W3C teaches creating a one to one mapping from the wire format to the message communications (Page 12: “wire format is actually XML”).

-In regard to dependent claims 10, 25, and 39, W3C teaches wherein TDL enables a transfer of a service reference across an application boundary (Page 1: Abstract; Pages 3-4: Introduction).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 12, 22, 27, 36, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).

-In regard to dependent claims 7, 22, and 36, W3C does not specifically teach wherein TDL supports inheritance of programming constructs. It would have been obvious to one of ordinary skill in the art at the time of the invention for the TDL of W3C to have supported inheritance of programming constructs, because W3C taught a TDL utilizing XML Schema, which was notoriously well known in the art at the time of the invention to provide inheritance to the typed programming constructs.

-In regard to dependent claims 12, 27, and 40, W3C does not specifically teach wherein the XML-based IDL was extendable to map additional constructs of a richer type system to an XML schema. It would have been obvious to one of ordinary skill in the art at the time of the invention for the XML based TDL of W3C to be extendable to map additional constructs or a richer type, because W3C taught a TDL utilizing XML Schema, which was notoriously well known in the art at the time of the invention to provide the extension element which allowed the appending of additional elements to an existing simpleType or complexType element construct.

8. Claims 11, 26, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51,

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<http://www.w3.org/TR/wsdl> (Hereafter W3C) in view of Jeff Schneider, "Convergence of Peer and Web Services", 07/20/01, pp. 1-7,

<http://www.openp2p.com/pub/a/p2p/2001/07/20/convergence.html> (Hereafter Schneider).

-In regard to dependent claims 11, 26, and 41, W3C teaches wherein the computing system was a web services distributed computing environment (Page 1: Abstract; Pages 3-4: Introduction"). W3C does not specifically teach wherein the computing environment was peer to peer. Schneider teaches the eventual convergence of web services computing environment and a peer to peer environment (Page 1: "it seems reasonable to predict the convergence of these paths"). It would have been obvious to one of ordinary skill in the art at the time of the invention for the web services of W3C to have implemented some of a peer to peer distributed computing environment, because Schneider teaches such a implementation would result in increased efficiency and reduced handling costs (Page 6: "increased efficiency and reduced handling costs")

Response to Arguments

9. Applicant's arguments with respect to claims 1, 16, and 30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eric van der Vlist, "Using W3C XML Schema", 10/17/01, pp. 1-17,
<http://www.xml.com/pub/a/2000/11/29/schemas/part1.html>

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121. The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALB



STEPHEN HONG
JULY PATENT EXAMINER